

IN THE CLAIMS

1. (Currently Amended) An image processing apparatus, comprising:
an image input device configured to input image data;
an image condition determining device configured to determine whether the input image data input by said image input device is in a true backlight condition or in a halation condition; and

a processing device configured to perform a specific process on the input image data based on the condition of the input image data determined by said image condition determining device,

wherein the image condition determining device is configured to generate a histogram showing a luminance of the image data based on the input image data and to determine whether the histogram is perfectly polarized, indicating the true backlight condition.

2. (Currently Amended) The image processing apparatus according to claim 1, wherein said image condition determining device ~~generates a histogram showing a luminance of the image data based on the input image data and evaluates a polarization degree of the histogram so as to determine the condition of the input image data~~ is configured to determine whether the histogram is perfectly polarized by determining whether the histogram includes a high luminance region that is completely separated from a low luminance region.

3. (Currently Amended) The image processing apparatus according to claim 2 ~~1~~, wherein said image condition determining device ~~evaluates the polarization degree of~~ is configured to determine whether the histogram is perfectly polarized using frequency and gradient values of the histogram.

4. (Original) The image processing apparatus according to claim 1, wherein the specific process performed by said processing device includes a dynamic range correction and a tone curve correction to be performed on the input image data based on the determination made by said image condition determining device.

5. (Currently Amended) A method for processing image data, comprising:
inputting image data;
generating a histogram showing a luminance of image data based on the input image data;
determining whether the input image data is in a true backlight condition or in a halation condition by determining whether the histogram is perfectly polarized, indicating the true backlight condition; and
performing a specific process on the input image data based on the condition of the input image data determined in the determining step.

6. (Currently Amended) The method according to claim 5, ~~further comprising~~
wherein the determining step comprises:
~~generating a histogram showing a luminance of image data based on the input image data; and~~
~~evaluating a polarization degree of the histogram to determine the condition of the input image data~~ determining whether the histogram includes a high luminance region that is completely separated from a low luminance region.

7. (Currently Amended) The method according to claim 6 5, wherein the ~~polarization degree of the histogram is evaluated~~ determining step comprises determining whether the histogram is perfectly polarized using frequency and gradient values of the histogram.

8. (Original) The method according to claim 5, wherein the specific process performed on the input image data based on the determination made in the determining step includes a dynamic range correction and a tone curve correction.

9. (Currently Amended) An image processing apparatus, comprising:
an image input means for inputting image data;
an image condition determining means for determining whether the input image data input by said image input means is in a true backlight condition or in a halation condition;
and

a processing means for performing a specific process on the input image data based on the condition of the input image data determined by said image condition determining means,

wherein the image condition determining means generates a histogram showing a luminance of the image data based on the input image data and determines whether the histogram is perfectly polarized, indicating the true backlight condition.

10. (Currently Amended) The image processing apparatus according to claim 9, wherein said image condition determining means ~~generates a histogram showing a luminance of the image data based on the input image data and evaluates a polarization degree of the histogram so as to determine the condition of the input image data~~ determines whether the

histogram is perfectly polarized by determining whether the histogram includes a high luminance region that is completely separated from a low luminance region.

11. (Currently Amended) The image processing apparatus according to claim 9, wherein said image condition determining means ~~evaluates the polarization degree of the histogram~~ determines whether the histogram is perfectly polarized using frequency and gradient values of the histogram.

12. (Original) The image processing apparatus according to claim 9, wherein the specific process performed by said processing means includes a dynamic range correction and a tone curve correction to be performed on the input image data based on the determination made by said image condition determining means.

13. (Currently Amended) A computer program product for processing image data, comprising:

a first computer code for determining whether input image data is in a true backlight condition or in a halation condition; and

a second computer code for performing a specific process on the input image data based on the condition of the input image data determined by the first computer code,

wherein the first computer code generates a histogram showing a luminance of the image data based on the input image data and determines whether the histogram is perfectly polarized, indicating the backlight condition.

14. (Currently Amended) The computer program product according to claim 13, ~~further comprising~~ wherein the first computer code comprises:

a third computer code for ~~generating a histogram showing a luminance of the image data based on the input image data; and~~ determining whether the histogram is perfectly polarized by determining whether the histogram includes a high luminance region that is completely separated from a low luminance region

~~a fourth computer code for evaluating a polarization degree of the histogram to determine the condition of the input image data.~~

15. (Currently Amended) The computer program product according to claim 14 13, ~~further comprising wherein the first computer code comprises:~~

a ~~fifth~~ fourth computer code for ~~evaluating a polarization degree of the histogram for~~ determining whether the histogram is perfectly polarized using frequency and gradient values of the histogram.

16. (Original) The computer program product according to claim 13, wherein the second computer code performs a dynamic correction and a tone curve correction on the input image data based on the determination made by the first computer code.

17. (Original) A computer readable recording medium configured to record the computer program product recited in Claim 13.

18. (Original) A computer readable recording medium configured to record the computer program product recited in Claim 14.

19. (Original) A computer readable recording medium configured to record the computer program product recited in Claim 15.

20. (Original) A computer readable recording medium configured to record the computer program product recited in Claim 16.